

Technical data sheet

011121MBA

Cored welding wire
ROBOFIL M 700

**CLASSIFICATION**

ASME IIC SFA 5.28 / AWS A 5.28

E110C-K4 H4

EN ISO 18276-A

T69 4 Mn2NiCrMo M M21 1 H5

ASME IX Qualification

QW-432 F-N° 6 QW-442 A-N° 12

DESCRIPTION

- Seamless high fill coppered metal-cored tubular wire for semi- and fully automatic gas shielded arc welding
- Single and multipass welding of high yield strength steels
- Combines advantages of both seamless and seamed tubular wires
- H_{DM} guaranteed < 4 ml/ 100g deposited metal over the whole parameter box
- No moisture pick up, excellent wire feeding properties, good weldability and low spatter

APPLICATIONS

High strength steels

S500QL – S690QL

N-A-Xtra70, Weldom 700, HY80, HY100

T1, Superelso 700, Suprafort 700, Shoralsim 690

ISO/TR 15608: Groups 1.2, 1.3, 2.2 and 3.1

APPROVALS

TÜV (10498.02)

TYPICAL ALL-WELD METAL ANALYSIS

C	Mn	Si	Cr	Ni	Mo
0.06	1.5	0.5	0.5	2.5	0.5

MINIMUM ALL-WELD METAL MECHANICAL PROPERTIES

Rm [MPa]	Rp0.2% [MPa]	A ₅ [%]	CVN [J]
770	690	16	-40°C: 47

TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES

Rm [MPa]	Rp0.2% [MPa]	A ₅ [%]	CVN [J]
820	760	17	-40°C: 60

SHIELDING GASEN ISO 14175: M21 (Ar + 15 - 25% CO₂)**OPERATING CONDITIONS**

Diameter [mm]	Current type	Current [A]	Voltage [V]	Stick-out [mm]
1.2	DC+ Pulsed or not	100 - 350	15 - 35	12 - 25
1.4		120 - 400	15 - 35	12 - 25
1.6		130 - 450	15 - 35	15 - 25

ROBOFIL M 700 can be welded as well backhand (trailing) as forehand (pushing)

WELDING POSITIONS

ROBOFIL M 700 is primarily used in the flat and horizontal-vertical positions. However, welds in other positions are also possible using the short-circuiting or pulsed arc modes of transfer.

PACKAGING

Diameter	1.0 mm	1.2 mm	1.6 mm
	EN ISO 544 – ASME IIC SFA-5.2 M		
Spool type	BS300		
Weight	15 kg		

Other packaging and other diameters: please consult us

Welding products and techniques evolve constantly. All descriptions, illustrations and properties given in this data sheet are subject to change without notice and can only be considered as suitable for general guidance. This document is intended to help the user make the correct choice of product. It is his responsibility to assess its suitability for his intended application.